



OSCILLATOR

Volume 24 Number 3

LOW FREQUENCY QRP TRANSATLANTIC RECORD

March 2001

Larry Kayser, VA3LK, and Lawrence "Laurie" Mayhead, G3AQC, made history by completing a two-way transatlantic QSO on 136 kHz during February. Larry was in Canada with 350 mW working Laurie with 5 W. The United Kingdom has an amateur band at 136 kHz and Canada has granted a few amateurs, including VA3LK, special authorization to experiment in the basement.

The team used ultra-slow CW with elongated characters. The dits were 90-seconds long and the dahs 180-seconds. The two-way contact took two weeks to finish, February 5 to 19. The stations used spectrographic software and computers for receiving. They used a combination of commercial and surplus equipment.

See ATLANTIC, page 4

Next Meeting — Wednesday, March 14th at 7 PM

The March meeting will be a quick one at the Beaverton Elks Club site. We will adjourn by seven-thirty, after the raffle. Maps will be distributed and caravans arranged for our visit to the new KPDX (Fox 49) studios in Beaverton. Don't be late

Come at 6:00 PM and enjoy a no-host dinner at the Elks' Buffet.

Prexy's Prose JD FORT, K7JDF

**...normal ebb
and flow...**

Where will the new operators come from? This question came to mind as I visited with hams galore at the recent Rickreal get-together. Without getting morbid, it does seem that the silent key section in QST is out pacing the new tickets being issued.

Now, I'm sure this is the normal ebb and flow of the hobby, but it does bring something important to our attention. We need to make sure as individuals, and as a club, that we encourage young people to experiment with the hobby.

In This Issue

136 kHz Record 1

Field Day Planning 2

Ten Commandments 3

OTVARC Data 4

World Amateur Radio Day 4

Public Service Calendar 5

ARES/CERT Exercise 7

Metro Shake '01 8

**It's about
team work
and
having fun...**

-See Page 2

See PREXY, page 3

Field Day: It's All About Teamwork and Having Fun!, by Dean KLØUX

Each year hams go out into the field to practice emergency communications. For many, it's the closet they'll ever come to a "real" emergency. However, when the end of June comes around, they are ready to go.

As with any emergency or public-service communications effort, it's not the work of one person that makes the event a success; it's the work of many. Each person has a different skill to contribute to the group. If you have'nt been to one you have'nt lived!

You will talk about it for a long time and one aspect or the other will interest you. Camping out, bugs, heat, rain, antennas, could have done that better, could have done worse, great social, kids had a ball, like to be a winner, etc and more. Did you know that the OTVARC club scored 7th in the nation for the 3 transmitter/battery class in 1982, whow!

By the time you are reading this article Field Day is just a little over 90 days away and much work needs to be planned and done before our group treks out into the wilderness. A site is needed that will accommodate our members, Travelers and other visitors; we need to develop a program for our youth who will also be attending with their parents, perhaps a bingo party Saturday evening; meals need to be planned and organized; we need volunteers to setup and operate the stations, and lastly an egress crew to insure that the area we occupied is in the same condition as before we arrived.

Field Day isn't about getting the biggest score. It's about team work. It's a story of how many different skills it takes to set up a station in the field and keep it on the air. Don't ever feel that you can't contribute something to amateur radio public service.

In the April newsletter I will be including a "Field Day Information Sheet." Please review it and consider attending and contributing to this year's Field Day. In May's *Oscillator*, I will summarize the information sheets and list what is missing.

You can call me, Dean, KLØUX, at 503-598-9083.

VE Update: February Exam Session, Carl Clawson, WS7L

The latest session was Saturday 3 February. We had 4 applicants. The result was one "drive by" upgrade, one upgrade to General, one new General, and one new Technician.

We will continue holding Exam Sessions on the first Saturday of each even numbered month throughout 2001:

7 April	4 August
2 June (SeaPac)	6 October
1 December	

Contact Carl, WS7L, 503-629-5796 or ws7l@arrl.net, to register. Reimbursement amount for 2001 is \$10.00 per exam session. There may be openings for additional Volunteer Examiners on our team. Contact Carl to express your interest.

TEN COMMANDMENTS FOR THINGS ELECTRIC, by Sean, N7EY

A good reminder though for us who delve into such things electric and eclectic!

Ten Commandments for the Radio Hobbyist ...

1. Beware of the lightning that lurketh in an undischarged capacitor lest it cause thee to be bounced upon thy buttocks in a most ungainly and painful manner.
2. Causeth thou the switch that supplieth large quantities of juice to be opened and thusly tagged, so thy days may be long in this earthly veil of tears.
3. Prove to thyself that all circuits that radiate and upon which thou workest are grounded, lest they raise thee up to high frequency potential and cause thee to radiate also.
4. Take care that thou useth the proper method when thou taketh the measure of high-voltage circuits so that thou dost not incinerate both thyself and the meter, for verily, though thou hast no account number and can be easily replaced, the meter hath one and, as a consequence, bringeth much woe unto the Supply Department.
5. Tarry thou not amongst those who deal in intentional shocks, for they are surely unbelievers and are not long for this world.
6. Take care that thou tamperest not with interlocks and safety devices, for this will incur the wrath of thy peers and bringeth the fury of the authorities down upon thy head and shoulders.
7. Workest thou not upon energized equipment, for, if thou dost, thy buddies will surely be buying beers for thy widow and consoling her in other ways not generally acceptable to thee.
8. Verily, verily, I say unto you, never service high-voltage equipment alone, for electric cooking is a slothful process and thou mightest sizzle in thine own fat for hours on end before thy Maker seeth fit to end thy misery and drag thee into His fold.
9. Trifle thou not with radioactive tubes and substances lest thou commence to glow in the dark like a lightning bug, and thy wife be frustrated nightly and have no further use for thee except thy wage.
10. Commit thou to memory the works of the prophets, which are written in the books of instruction, which give the straight dope and which console thee, and thou canst not make mistakes

[Thanks to Yakima Amateur Radio Club]

Prexy, from page 1

Conventional wisdom is that the Internet has taken the place of the thrill we experienced with our first rigs. So, what do we do to encourage the new generation? It would be sad to think that a sun spot cycle would come and go without the excitement and thrill of hearing the new hams tell their stories of mobile JA contacts on 10 meters.

This is why the Board is looking for your input on outreach ideas. Make sure you send us an e-mail or give any of us a call at the numbers listed. We will be grateful for your input.

The March meeting will be a quick one as we plan to adjourn by seven-thirty. After the raffle drawing we will hand out maps and arrange a caravan to the new KPDX (Fox 49) studios in Beaverton for a tour.

Hope you join us and don't forget the wearin' o the green on the 17th. Happy St. Patrick's Day from the OTVARC board!

World Amateur Radio Day 18 April 2001, by Everett, W6ABM

The theme for World Amateur Radio Day has been selected by the International Amateur Radio Union. The Union is the world organization for Amateur Radio Societies.

"Providing Disaster Communications: Amateur Radio in the 21st Century," has been chosen for the 2001 theme. The selection was based on two considerations. First, to assist in dispelling the notion held by some members of the public that technological changes have bypassed and diminished the future role of the amateur services. The rapid advancement of communications technology actually opens new doors for amateur radio to pass through. Excellence and encouragement of such advancement has always been a part of amateur radio.

Second, to reaffirm the importance of amateur radio as a resource to help mitigate the effects of disasters by providing communications to aid humanitarian efforts. Ham radio operators are still the first responders in natural and human-caused disasters. They are trained and ready to act without waiting for decision-makers to direct them. They save lives and assist in rapid restoration of normal means of communication.

Many member societies will mark the day with special events and programs.

OTVARC DATA..., by Dean KLØUX

Welcome:

Please welcome the following new prospective members: Tom Popp, KA0TP; Alex Malyouq, KLD7LUR; and Jim Adler KA7TQG.

License Upgrades:

Jim Adler, KA7TQG, from General to Extra; Paul Thutt, KC7PMU, General to Extra; Ernie Johnson, KC7PMZ, from Technician to General. Nice job!!

Birthdays for March:

Al Berg, W7SIC (3/22); Jack Brutcher, W7AAJ (3/14); Gene Buell, KA7KBH (3/6), Everett Curry Jr (our editor), W6ABM (3/7); Ray Deeth, K7VDQ (3/12); Arch Doty, W7ACD (3/28); JD Fort (our BIG! Leader), K7JDF (3/2); Geno Gray, K6GY (3/10); Ron Kinder K7VMN, (3/27), Dale LeBarron, W7FBP (3/12); Greg Milnes, W7OZ (3/5); Ira Rubin, KF7QS (3/24); Randy Stimson, KZ7T (3/10); Phil Teck, N7OY (3/3).

I wonder who is the youngest and oldest?

Atlantic 136 KHz Record, from page 1

The team agreed that all QSO information would be exchanged over the LF radio link. "We are the first to do a two-way QSO on LF across the North Atlantic as far as I am concerned," Kayser said. "We are the ones who put the stakes in the ground; others will build on what we have done."

The ARRL petitioned the FCC in October 1998, to create two amateur Low Frequency allocations for US amateurs. They are: 135.7-137.8 kHz and 160-190 kHz. There has been no action on the request.

TRAVELERS

The March 16th to 18th campout will be at Cape Kiwanda RV Park in Pacific City. The park is located within walking distance of the beach where the famous Dorry Fleet is launched. The sandy hilltop provides an excellent takeoff point for both hanggliders and parasailers.

For folks who want to join the adventure but don't camp, there are several local hotels. If you are interested in wildlife, the park always has a few 'wild bunnies' to entertain you.

Due to Geno Buell's back surgery Tom and Barb Bailey have taken over as wagon masters. They need a head count as soon as possible so please let them know if you will be attending.

Tom and Barb Bailey will be the wagon masters. If you can come to camp, come for the day or for just dinner contact Barb or Tom at 503-538-2266 or by e-mail at reno78@GTE.net.

Public Service Contact email

Randy Stimson, kz7t@arri.net
Steve Johnson,
signpeddler@home.com
Betty Mickley,
n7rex@teleport.com
Jim Schaeffer,
Jim@sulzerpumps.com
Marti Brutcher, w7ayl-
marti@juno.com
Hugh Ellsworth, kb7ljv@arri.net

LUNCH BUNCH

The Lunch Bunch needs a coordinator to help out while Harold is nursing Julie back to full functioning...maybe 3 or 4 months. Call Harold, WAØBRU at 503-646-1546.

PUBLIC SERVICE CALENDAR

April

MS Walk - MS Society
Randy Stimson KZ7T

19 May

Reach The Beach -
Lung Association
Randy Stimson KZ7T

July

Rose City Relay
Steve Johnson N7VIC

Rainier To Pacific
Steve Johnson N7VIC

Columbia Classic
1000 Friends of Ore
Randy Stimson KZ7T

28 July

Summit To Surf
Diabetes Association
Betty Mickley N7REX

4-5 August

MS 150 - MS Society
Hams: Randy Stimson
Lunch: Betty Mickley

August

Bridge Peddle -
Providence Healthcare
Jim Schaeffer KB7ADH
⇒⇒

5th Wednesday

The next Fifth Wednesday Contest will be held May 30th, with two more on August 29th and October 31st this year. The Fifth Wednesday Contest is an exercise to determine 2 meter capability using simplex (147.54 MHz).

Awards are given for three classes of stations: Single Operator; Single Operator QRP (5 watts or less); and Multiple Operator. The Data and Log Sheet for the May 30th Contest will be in the May issue of the *Oscillator*.

If you haven't participated in the past, why not fire up your 2 meter gear on May 30th and give it a try. You'll enjoy the event.

24-25 August

Hood To Coast
Steve Johnson N7VIC

8-16 September

Cycle Oregon - DOT
Randy Stimson KZ7T

September

Race For The Cure
Amer Cancer Society
Marti Brutcher W7AYL

30 September

Portland Marathon
Hugh Ellsworth KB7LJV

October

Walk To Cure Diabetes
Diabetes Association
Betty Mickley N7REX

23 November

Santa Claus Parade
Meyer & Frank
Jim Schaeffer KB7ADH

"Am I the only one thinking of Field Day?" From the nwq-l reflector

Bill Todd, N7MFB, asks in a recent post to the QRP email reflector, "Am I the only one thinking of Field Day lately? It sure beats me why I am thinking of Field Day in February, but every time I walk by the Bush Pioneer Park in Bay Center, I think about the cool antenna farms that we could put up this year. Maybe the reason I am thinking about Field Day 2001! Maybe its because a member of the Colorado QRP Club asked me to write a short article about Paul Beckett, KF7MD, and his participation in our first Northwest QRP Field Day in '93."

Stan Tarena, K7SY, will remember that's the year of our first Field Day experience. Paul and I and a couple of other hams drove to a mountain in Eastern Washington and set up the Eastern Washington Northwest QRP station. We had a bunch of different antennas in the air, but Paul really blew us all away with his multi-element log periodic wire antenna for 20 - 10 meters. That antenna really blasted a hole in the sky and helped us rack up the contest all day and night.

Bruce, KG7CR, Bob, W7CD, and some others set up the Western Washington Northwest QRP effort on top of Cougar Mountain east of Issaquah. Bob set up a pair of HF6V verticals that looked like a giant set of "rabbit ears" that actually worked pretty well! I think that Stan operated with the West Seattle ARC that year.

Each group had a great time...but the reason that Paul got the attention of the Colorado QRP Club folks, is that he moved to Colorado the following year and used his monster Log Periodic wire antenna to help them put in a great score. So, writing this information for the CO QRP Club representative got me to thinking about what we might want to do this year. I think it would be great if someone wanted to put up a similar (or better) antenna in between the 100+ ft high trees surrounding the Bush Pioneer Park here in Bay Center.

Meanwhile, Stuart Rohre, K5KVH, is thinking about Field Day 2001 at the University of Texas. He replied, "I will take the bait regarding what we are thinking on Field Day down here in Texas."

We will put up a 1.25 wave loop based on 160m or so. Maybe two of them, each 20 feet up horizontal. We will use two IDEZ dipoles, which are 5/8 wave leg Zepps based on 80 meters.

I am toying with a wild idea of adding at the peak of the inverted Zepp dipoles, a set of director wires for the major bands we use, 40m (works on 15), 20m, 10m, aimed mostly to ham population centers. These would be fanned out from the center insulator of the dipole, but would allow us to stake them with tent pegs in the direction we wanted. We could move them as the propagation moved west during Saturday afternoon.

Another dream is to build a Moxon rectangle or one for each band 20 to 10 meters. Maybe to try out a Lazy H for 15 meters, but use a transmatch with it, for 20 and 10 meters. It would be probably aimed mostly east and west, to ham centers on the coasts.

What ideas are working on you for the OTVARC Field Day 2001? Check your calendar and clear June 22-24. This is something you'll not want to miss.

Never participated in a Field Day? This is the time to start. There are varied tasks and opportunities to be involved.

WANTED

More than a few good Volunteers!

Join us on Saturday, April 7th, for a joint Community Emergency Response Team (CERT) and Amateur Radio (ARES) fun-filled training adventure!

Includes:

- Simulated earthquake disaster scenario
- Situation status and damage assessment reporting "scavenger hunt"
- Quick training session leading into the exercise
- Pre-selected leadership roles (...so don't worry that you'll be put in the "hot seat"!)
- Pizza feed (Fire Department buys!)

Disaster skills a little rusty? Are you an amateur radio operator, but you haven't been through CERT training? No problem!

We'll keep you busy!

Saturday, April 7th, 9 a.m. until 1 p.m. (including lunch).

Location will be in a Hillsboro neighborhood. Stay tuned for updates. If you RSVP, I'll make sure you get the information!

Please RSVP to Sharon Kennedy, KD7CWP,
Hillsboro Emergency Manager, at (503) 681-6412
or send an e-mail to sharonk@ci.hillsboro.or.us



Come Play With Us!

Metro Shake '01

Regional Earthquake Exercise

Wednesday, April 11th, 1 - 9 p.m

Shift change briefings start @ 5 p.m., so you're welcome to come after work to staff the second shift!

Major Participants:

- Clackamas, Multnomah, Washington, and Tillamook Counties, and most of their incorporated cities
- Utilities (NW Natural, PGE, Verizon, TVWD, USA, etc.)
- Volunteer agencies (American Red Cross, ARES District 1)
- Portland metro area Hospitals

The scenario is a moderate earthquake under Lake Oswego (6.0 Magnitude on the Richter Scale), causing pockets of damage throughout the Portland metro region.

We are scripting a significant amount of amateur radio play!

Washington County ARES will staff:

- Washington County Emergency Operations Center, Land Use and Transportation Department Operations Center, and Sheriff's Department Operations Center
- Beaverton, Forest Grove, Hillsboro, Tigard, and Tualatin Emergency Operations Centers
- TVF&R Fire Operations Center
- St Vincent, Tuality Hillsboro, and Tuality Forest Grove Hospitals
- Amateur Radio Simulation Cell

iEARS will also play. (That's Intel's Emergency Amateur Radio Service, many of whom are also ARES members)

**Contact Sharon Kennedy, KD7CWP, Hillsboro Emergency Manager,
to volunteer: (503) 681-6412 or sharonk@ci.hillsboro.or.us**

Club Contact Directory

OTVARC Executive Board

President	J.D. Fort	K7JDF	k7jdf@arri.net	503-259-0269
Vice President	Phil Teck	N7OY	philmay@hevanet.com	503-649-7533
Secretary	Dean Davis	KL0UX	deandavis@alpinsoft.com	503-598-9083
Treasurer	Linda Sutton	KC7YTD	kb7pvw@arri.net	503-246-8879
Trustee	Wes Allen	K7WWG	wesa@dnc.net	503-649-3295
Trustee	Janet Bell	WB7FJC	wb7fjc@arri.net	503-648-4147
Trustee	Jim Blanchard	W7HOW	w7how@arri.net	503-579-0248
Trustee	Alvin Carlson	KB7VHI	kb7vhi@arri.net	503-629-5728
Trustee	Julia Landers	KD7GQW	kd7gqw@aol.com	503-646-1546

Club Functions

ARRL Coordinator	Bob Orr	WF7Q	boborr@onlinemac.com	503-472-2716
Equipment Loan	Dean Davis	KL0UX	deandavis@alpinsoft.com	503-598-9083
Equipment Valuation	Randy Stimson	KZ7T	kz7t@arri.net	503-297-1175
Equipment Trustee	Al Berg	W7SIC	w7sic@pocketmail.com	503-816-7098
Emergency Services	Alvin Carlson	KB7VHI	kb7vhi@arri.net	503-629-5728
Field Day Coordinator	Harold Landers	WA0BRU	wa0bru@aol.com	503-646-1546
	Dean Davis	KL0UX	deandavis@alpinsoft.com	503-598-9083
Health & Welfare	Linda Sutton	KC7YTD	kb7pvw@arri.net	503-246-8879
Historian	Al Berg	W7SIC	w7sic@pocketmail.com	503-816-7098
Internet Home Page	Marc Chamberlin	WA7PXW	marce@easystreet.com	503-357-1869
	Betty Mickley	N7REX	n7rex@teleport.com	503-642-1284
Member Badges	Carl Clawson	WS7L	ws7l@arri.net	503-629-5796
Newsletter Editor	Everett Curry	W6ABM	w6abm@arri.net	503-681-2345
Newsletter Distribution	Dean Davis	KL0UX	deandavis@alpinsoft.com	503-598-9083
Nominating Committee	Jim Blanchard	W7HOW	w7how@arri.net	503-579-0248
Public Relations	J.D. Fort	K7JDF	k7jdf@arri.net	503-259-0269
Scholarship	Carl Clawson	WS7L	ws7l@arri.net	503-629-5796
Sea-Pac	Al Berg	W7SIC	w7sic@pocketmail.com	503-816-7098
"	Brad Beach	N7NVC	bbeach@teleport.com	503-657-1781
"	Jim Schaeffer	KB7ADH	jim.schaeffer@sulzerpumps.com	503-245-2518
"	Randy Stimson	KZ7T	kz7t@arri.net	503-297-1175
"	Will Sheffield	N7THL	n7thl@juno.com	503-642-7314
Station Trustee	Hanford Van Ness	KE7BB	ke7bb@email.msn.com	503-246-7975
Social	Harold Landers	WA0BRU	wa0bru@aol.com	503-646-1546
Trailer	Dee Lynch	K7JRB	deek7jrb@arri.net	541-745-1025
Interest Contacts				
Project Night	Alan Chinnock	KB7POR	kb7por@aol.com	503-636-2237
QRP				
Repeater	Wes Allen	K7WWG	wesa@dnc.net	503-649-3295
Public Service	Randy Stimson	KZ7T	kz7t@arri.net	503-297-1175
RFI & TVI	Dale Mosby	K7FW	dale@sequent.com	503-640-0217
Satellites	Everett Curry	W6ABM	w6abm@amsat.org	503-681-2345
Technical Specialist				
Tower Ordinances	Greg Milnes	W7OZ	w7oz@arri.net	503-648-6990
Training (upgrade)	Janet Bell	WB7FJC	wb7fjc@arri.net	503-648-4147
Travelers	Betty Mickley	N7REX	n7rex@teleport.com	503-642-1284
VE Test Coordinator	Carl Clawson	WS7L	ws7l@arri.net	503-629-5796
VHF/UHF	Arnold Jensen	W7DSA		503-543-3713

Hamfests And Conventions

4 March 2001

Burnaby Swap Meet

Burnaby Amateur Radio Club
New Westminster Armories
Westminster, B.C.
www.rac.ca

Bob VE7KW (604) 524 9177
Email: VE7KW@RAC.ca

10 March 2001

Mike & Key Swap Meet

Western Wash. Fairgrounds
Puyallup, Washington
www.mikeandkey.com/flyer01.htm
Michael Dinkelman, N7WA
425-867-4797 253-631-3756
mwdink@eskimo.com

21-22 April 2001

Washington State Conv. &

Yakima Hamfest

Yakima, Washington
Eagle.ykm.com/~wyaq/x-hamfest/
hamfestreg.html
Masonic Center
510 North Naches Avenue
Ka7ljq@arri.net

12 May 2001.

Eugene, Oregon
Fourth Annual Eugene Hamfair.
at "Bingomania".

1-3 June 2001

Northwestern Division

ARRL Convention

Tualatin Valley ARC
Seaside, Oregon
http://www.seapac.org
Randy Stimson, KZ7T
PO Box 219295
Portland, OR 97225
503-641-3776
kz7t@arri.net

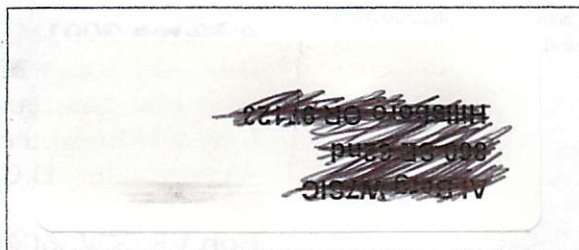
WORLDWIDE DISTRIBUTION



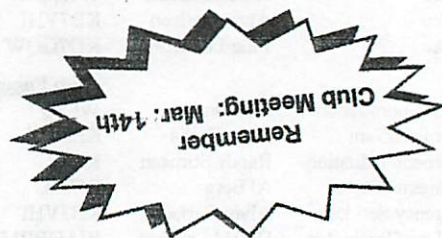
Rich KK7PL
Manager

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ALBANY CA • ATLANTA GA • BURBANK CA • DENVER CO
NEWCASTLE DE • OAKLAND CA • PHOENIX AZ • PORTLAND OR
SALEM NH • SAN DIEGO CA • SUNNYVALE CA • WOODBRIDGE VA



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 Repeater: 146.96 MHz
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Aloha OR 97006-0132
 Post Office Box 5132
 Amateur Radio Club
 Oregon Tualatin Valley

OTVARC

Club Information

Purpose: The Oregon Tualatin Valley Amateur Radio Club, a Not-for-profit corporation, wants to be instrumental in helping the prospective and established Amateur to become a proficient communicator in the Amateur Radio Service.

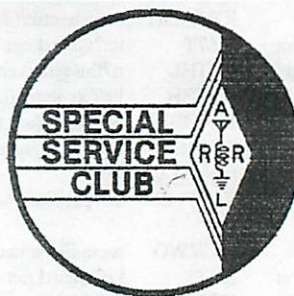
Additionally, our intent is to promote the advancement of Amateur Radio Service, through the following five objectives:

1. Education & Training of new and licensed Amateurs.
2. Public Service during events & community activities.
3. Emergency communications in emergencies & disasters.
4. Hobby enhancement through meetings, nets & contests.
5. Social contact with other amateurs & interested persons.

Special Service Club: OTVARC is an ARRL Special Service Club. The ARRL grants us this distinction due to our participation in emergency preparedness exercises, public service events and other service-oriented programs. In addition, continuing educational and training programs are conducted for FCC licenses. OTVARC benefits when you join or renew your membership in the ARRL through the club. Contact the treasurer at any regular meeting.

Newsletter: The OTVARC Oscillator is the club newsletter. It is published monthly and mailed on the first of the month. Opinions, views, and recommendations of its contributors are not necessarily those of the club, its officers, advertisers or the editorial staff. Editor's E-mail: ecurry@teleport.com. April 2001 OSCILLATOR deadline is Tuesday, March 20th.

Internet Home Page: WWW.OTVARC.ORG



Correspondence: All correspondence may be sent to **OTVARC, PO Box 5132, Aloha, OR 97006-0132.**

Meetings: We have two meetings per month. The Board meeting is on the fourth Wednesday of each month. Club business is conducted at this meeting. All members are welcome to attend. Contact the President for location and time. The general meeting is on the second Wednesday of each month at the Beaverton Elks Lodge. 3500 SW 104th Ave. (1 block north of Canyon Road). Meetings start at 7 PM. If you would like to come early, you can get a nice meal from the Elks for less than \$6.00.

Membership: OTVARC is open to anyone who is interested in amateur radio. You do not need to be a licensed radio amateur to join. Dues are: Full member, \$10/yr; Associate member (non-licensed); \$10/yr; Family members of full member, \$5/yr; Life memberships available - see the Treasurer. Only full members and life members may vote on club business and serve as club officers. All memberships expire on the last day of the calendar year. If you would like to join during the year, see the club treasurer for prorated dues schedule.

How to join: Mail the Membership application and/or renewal form with your dues to the Club address.